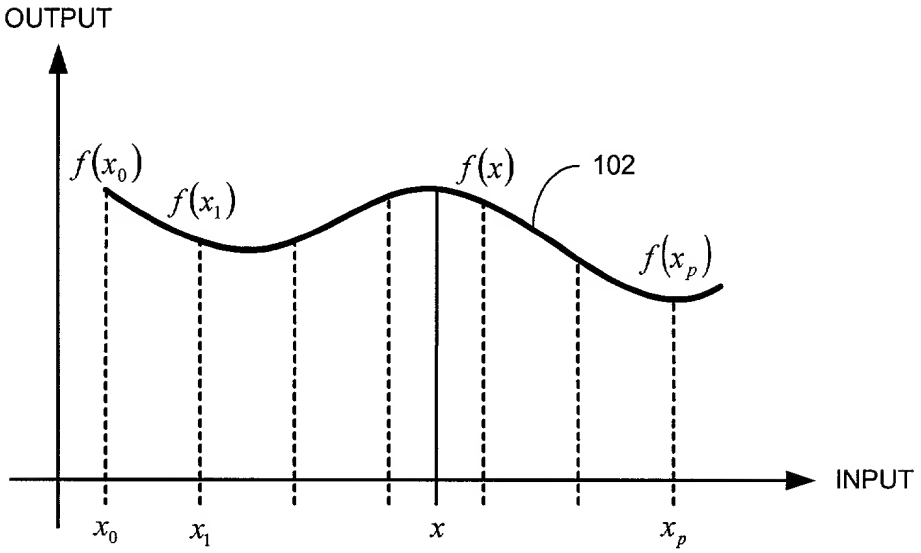
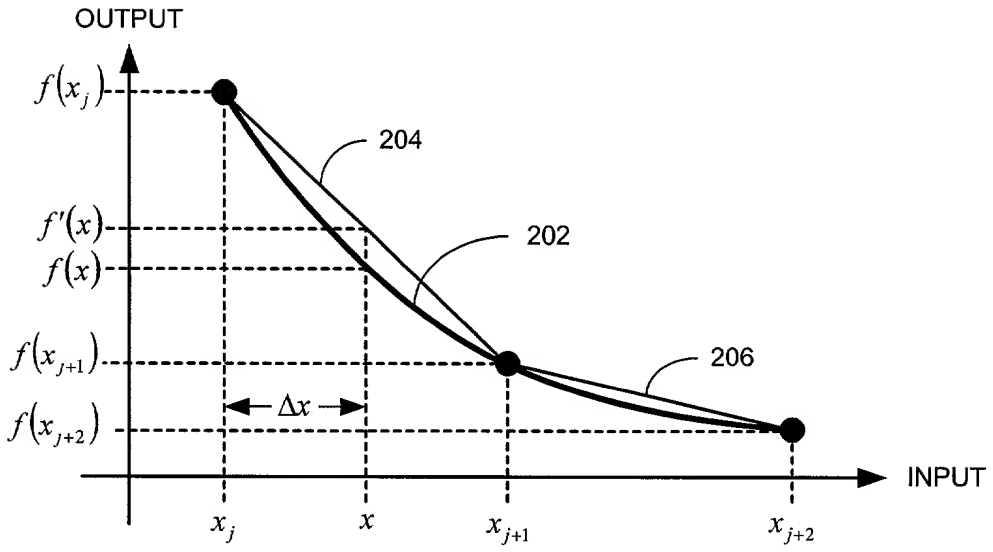


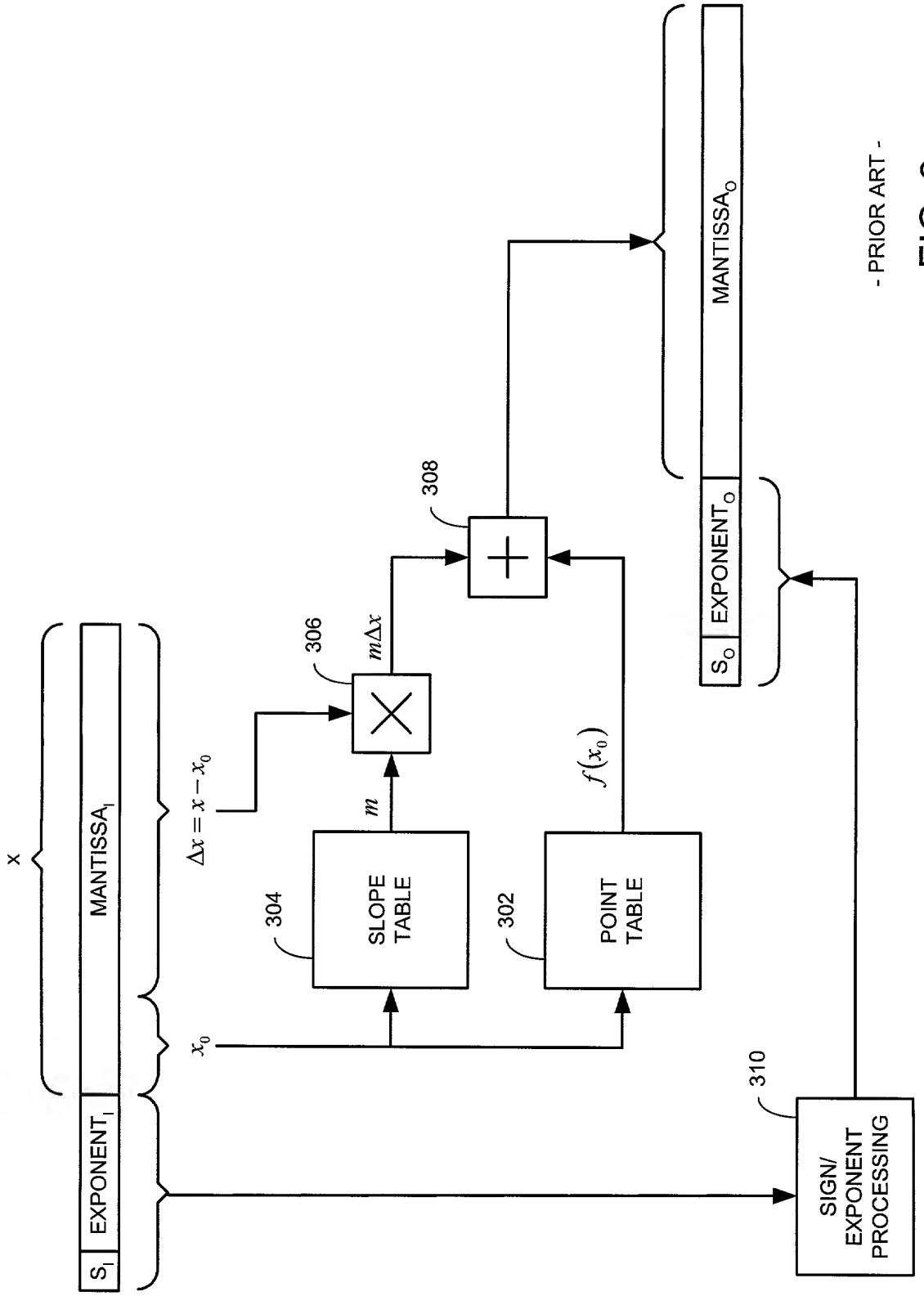
- PRIOR ART -

FIG. 1



- PRIOR ART -

FIG. 2



- PRIOR ART -

FIG. 3

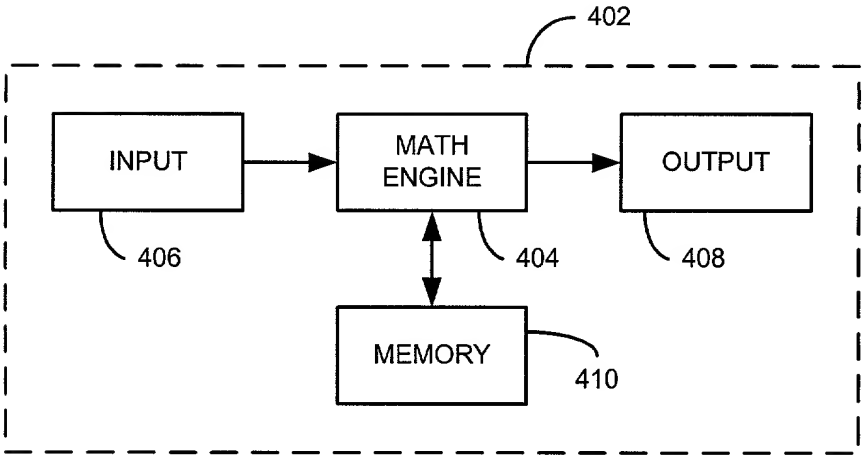

402
INPUT
MATH ENGINE
OUTPUT
406
404
408
MEMORY
410

FIG. 4

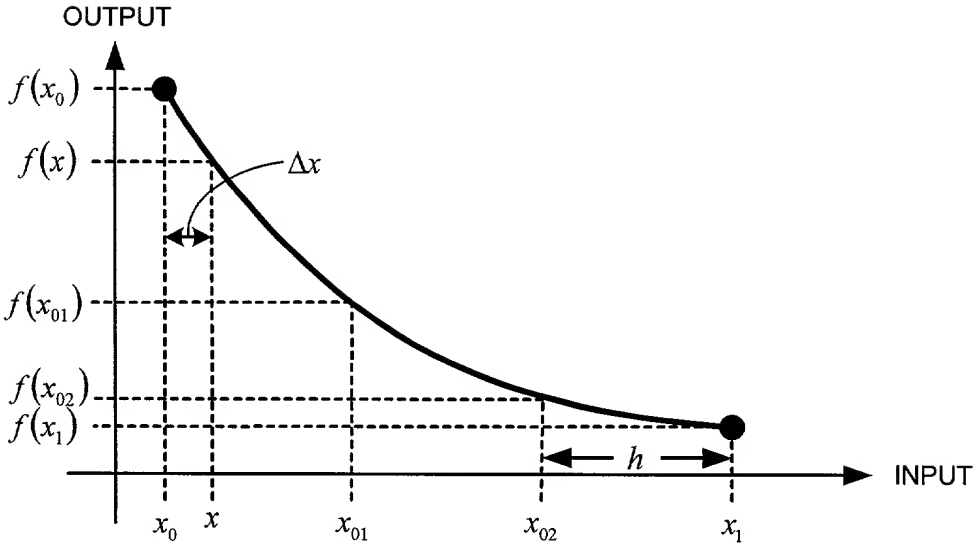

OUTPUT
$f(x_0)$
$f(x)$
Δx
$f(x_{01})$
$f(x_{02})$
$f(x_1)$
h
INPUT
x_0
x
x_{01}
x_{02}
x_1

FIG. 5

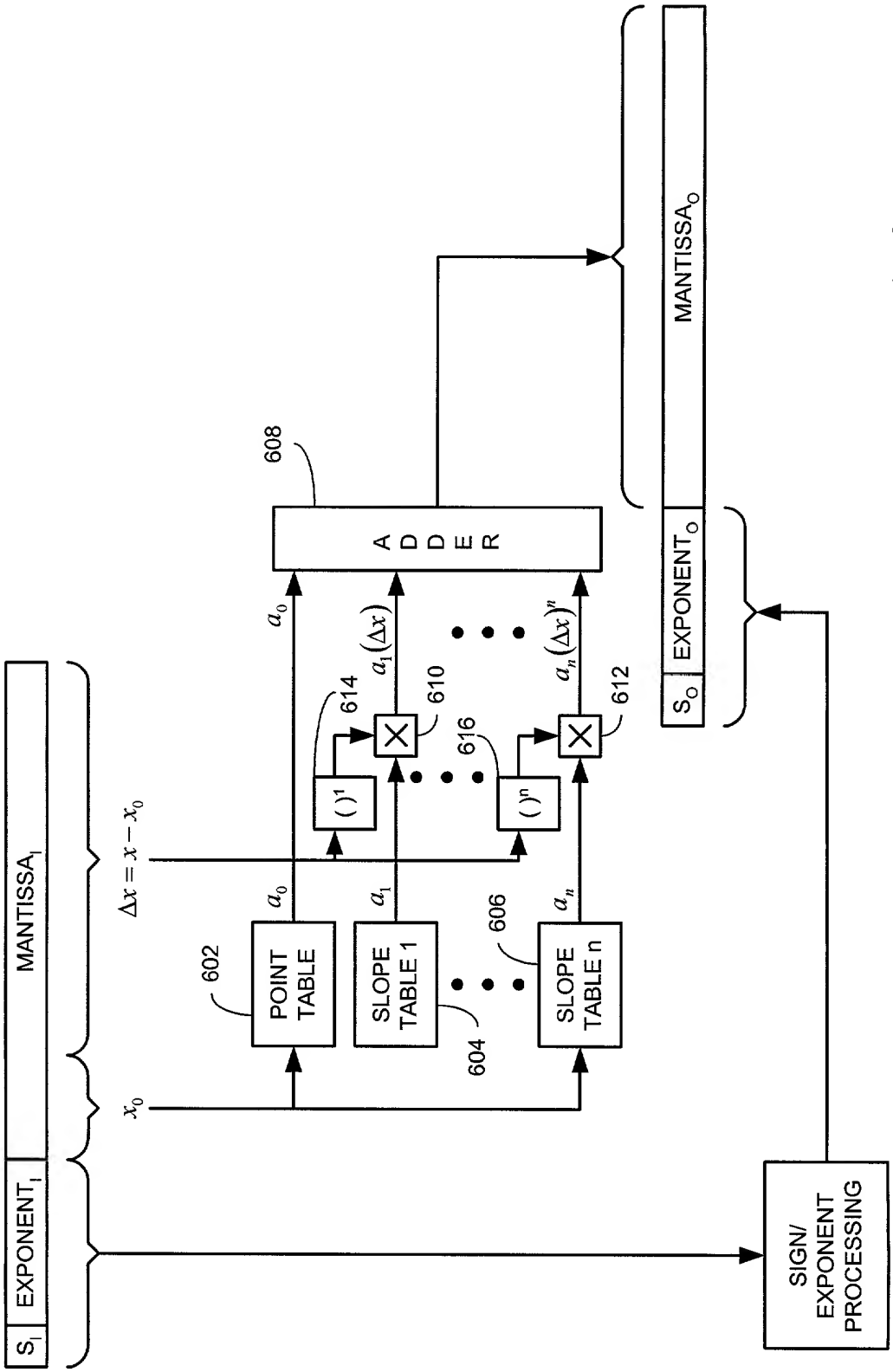

S_I
EXPONENT$_I$
MANTISSA$_I$
x_0
$\Delta x = x - x_0$
602
POINT TABLE
604
SLOPE TABLE 1
606
SLOPE TABLE n
a_0
a_1
a_n
614
$()^1$
616
$()^n$
610
612
$a_1(\Delta x)$
$a_n(\Delta x)^n$
608
ADDER
SIGN/ EXPONENT PROCESSING
S_O
EXPONENT$_O$
MANTISSA$_O$

FIG. 6

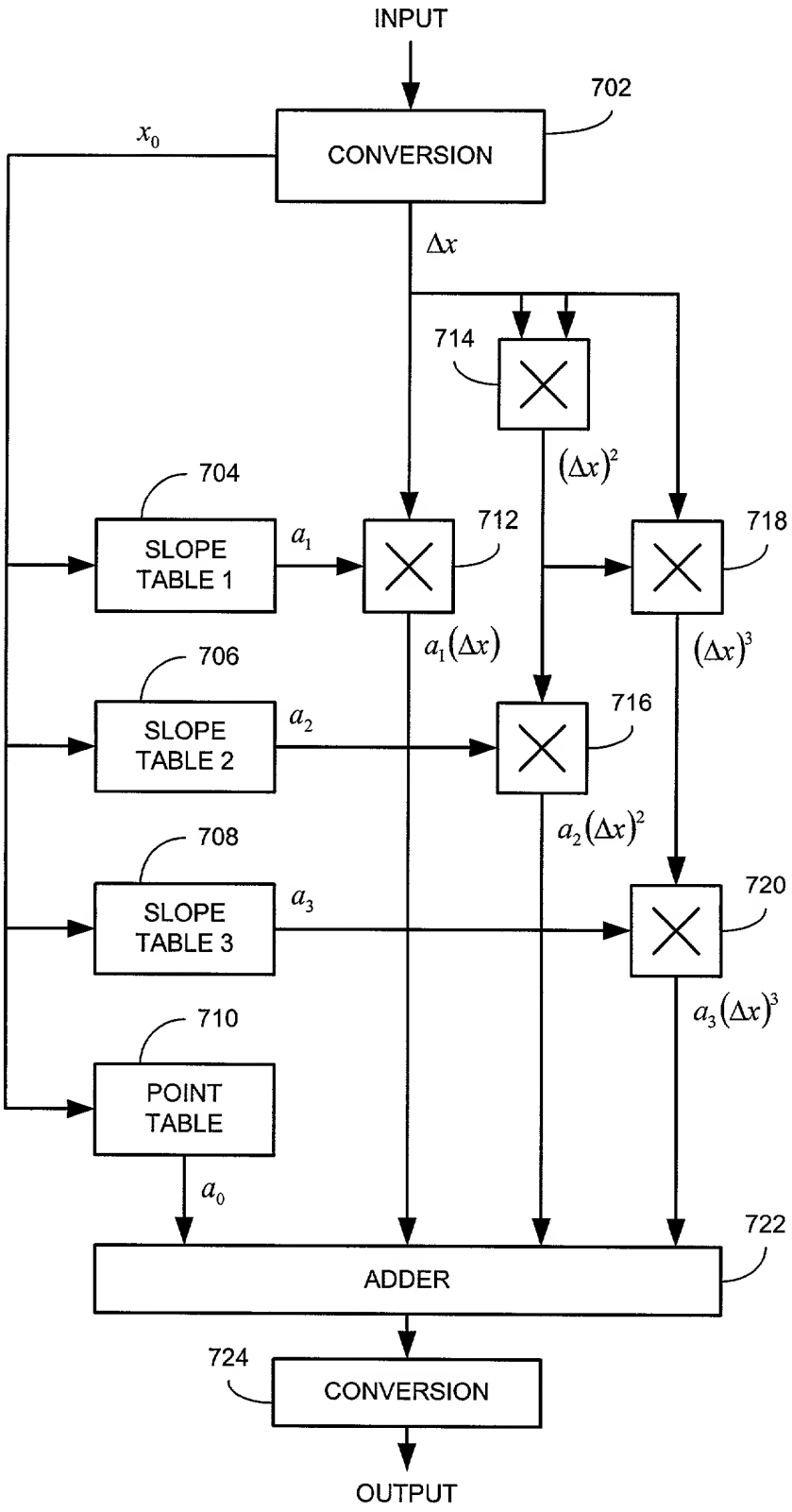

INPUT
702
CONVERSION
x_0
Δx
714
$(\Delta x)^2$
704
SLOPE TABLE 1
a_1
712
718
$a_1(\Delta x)$
$(\Delta x)^3$
706
SLOPE TABLE 2
a_2
716
$a_2(\Delta x)^2$
708
SLOPE TABLE 3
a_3
720
$a_3(\Delta x)^3$
710
POINT TABLE
a_0
722
ADDER
724
CONVERSION
OUTPUT

FIG. 7